

ABSTRACT

A method and device for performing digital signal magnetic recording and reproduction in analog format on a medium, using a conventional analog video tape recorder (VTR). The digital signal is digitally modulated and inserted into the active part of scan lines of a standard composite video signal, and converted to an analog signal for storage on the medium. When the signal is reproduced from the medium, the analog signal is converted to a digital composite video signal, and the modulated data is extracted from the active part of the scan lines and demodulated to restore the original digital signal. To improve the synchronization between the demodulation and modulation stages, during demodulation the color burst of the composite video signal may be used as a pilot signal to recover the sampling clock and regenerate the one or multiple carriers. Error correction coding may be employed to reduce the signal-to-noise ratio of the reproduced signal.